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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,869	08/10/2006	Martin Israelsson	P19251-US1	7312
27045	7590	10/28/2008		
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024				
EXAMINER				
WOO, KUO-KONG				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/597,869

**Applicant(s)**

ISRAELSSON ET AL.

**Examiner**

KUO WOO

**Art Unit**

4133

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 8/10/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Status of the Claims**

1. Claims 1-10 have been cancelled. Claims 11-20 are currently pending in this office action.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(0) because;
  - a. Fig. 1, CORE NETWORK, "HRL" reference need to replace by "HLR" as Home Location Register.
  - b. Fig. 4A, 4B and 4C, MBMS handler missing reference number, in this specification the applicant designate that reference number as "40".
  - c. Fig. 5C, lur Linking SESSION "72B" need to designate by reference number "72C".
  - d. Fig. 6, 3 rd DECISION SIGNAL, LATE lur LINKING; "ptm DECISION" should be designated by "ptp DECISION".

### ***Specification***

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For example, "counting of a set of power consuming events occurring at the drift radio network control node ", the specification fails to define how to determine the power consumption from said events as claimed, therefore the applicant fails to show, make and/or use this claimed invention.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11, 14-16, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohlsson et al. (U.S. Patent Application Number 20020068571 A1), hereinafter referred to as Ohlsson.

As to claim 11, a method for registration of a drift Radio Network Controller (DRNC) said method comprising the steps of:

"Defining a counter and a first threshold value" Ohlsson discloses (Paragraph 10, A first event is Radio Link Addition, which occurs when the measured and filtered Pilot signal from the destination base station), wherein the measure is same as count, pilot signal level is read as first threshold value;

"using the counter for counting of a set of power consuming events occurring at the drift radio network control node" Ohlsson discloses (Paragraph 10, Pilot signal from the destination base station exceeds a certain handover threshold), since applicant fails to define the power consumption in specification, any signal transmission can be treated as power consumption event. Therefore strength of pilot signal at handover events are read as a set of power consuming at DRNC event.

"Determining the total power consumption caused by said events" Ohlsson discloses (Paragraph 10, a Fixed Offset threshold from the best (great strength) pilot signal in the active set, and is properly chosen constant). Wherein pilot signal strength is read as power consumption;

"Delaying registration of the drift radio network control node with a core network node until the counter has exceeded the first threshold value" Ohlsson discloses (Paragraph 11, For the events to occurs, typically the pilot signal must maintain its strength for a predetermined trigger time and a certain hysteresis value may be factored into the threshold expression), Wherein the trigger event has been waited until pilot signal level reach certain threshold level which is same effect as delaying registration to trigger event.

As to claim 14, the method according to claim 11, further comprising the steps of:

"Defining a second threshold value" Ohlsson discloses (Paragraph 11, A second event is Radio Link Removal, which occurs when the measured and filtered pilot signal from the destination base station falls below the threshold of Expression, Wherein defines second threshold value as the signal pilot strength level reaching trigger level for the next action;

"Delaying deregistration of the drift network control node until the counter has a value below the second threshold value. Ohlsson discloses (Paragraph 11, Radio Link Removal, which occurs when the measured and filtered pilot signal from the destination base station falls below the threshold of Expression for a predetermined trigger time), Wherein after predetermined the time, radio link is removed after delaying deregistration of the DRNC.

As to claim 15, "The method according to claim 14, wherein the second value is selected to provide hysteresis protection" Ohlsson discloses (Paragraph 25, The invention allows a soft handover procedure to be executed at a point in time when the cost of execution is as low as possible, thereby leading to increased capacity in the network and low risks for dropped calls at soft handover). As Ohlsson earlier teaches to select second value to trigger the handover event which lower the risk to drop the calls and further protect the network.

As to claim 16, A radio network control node acting across an Iur interface as a drift radio network control node for a user equipment unit (UE) in a communications system supporting a multimedia broadcast multicast service (MBMS), comprising:

"A first counter for counting a set of power consuming events occurring at the drift radio network control node" Ohlsson discloses (Paragraph 10, A first event is Radio Link Addition, which occurs when the measured and filtered Pilot signal from the destination base station), Wherein the measure is same as count, pilot signal level is read as first threshold value;

"Means for determining the total power consumption caused by said events" Ohlsson discloses (Paragraph 10, a Fixed Offset threshold from the best (great strength) pilot signal in the active set, and is properly chosen constant), Wherein pilot signal strength is read as power consumption;

"means for delaying registration of the drift radio network control node with a core network node until the counter has exceeded a first threshold value" Ohlsson discloses (Paragraph 11, For the events to occur, typically the pilot signal must maintain its strength for a predetermined trigger time and a certain hysteresis value may be factored into the threshold expression), Wherein the trigger event has been waited until pilot signal level reach certain threshold level which is same effect as delaying registration to trigger event.

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As to claim 19, "The radio network control node according to claim 16, further comprising means for delaying deregistration of the drift network control node until the counter has a value below a second threshold value" Ohlsson discloses (Paragraph 11, For the events to occurs, typically the pilot signal must maintain its strength for a predetermined trigger time and a certain hysteresis value may be factored into the threshold expression), Wherein the trigger event has been delayed until pilot signal level reaches certain threshold level which is same as delaying registration of the DRNC.

As to claim 20, "The radio network control node according to claim 19, wherein the second threshold value is selected to provide hysteresis protection" Ohlsson discloses (Paragraph 25, The invention allows a soft handover procedure to be executed at a point in time when the cost of execution is as low as possible, thereby leading to increased capacity in the network and low risks for dropped calls at soft handover), As Ohlsson earlier teaches to select second value to trigger the handover event which lower the risk to drop the calls and further protect the network.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



7. Claims 12-13, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Ohlsson et al. (U.S. Patent Application Number 20020068571 A1), hereinafter referred to as Ohlsson as applied to claims 11 and 16 above, and further in view of Meago ( US Patent Application Number 2240223513 A1).

As to claim 12, Ohlsson does not expressly disclose” The method according to claim 11, wherein the number of events occurring at the drift network control node which is counted by the counter is a number of user equipment units for which a lur linking procedure is performed for the MBMS session” Meago discloses (Paragraph 54, tracking: This is a function that allows UTRAN to follow the mobility of multicast subscribers. Inherently it can be used as a means of counting multicast subscribers), wherein tracking the number of a subscriber is read as counting a number of user equipment units.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ohlsson's teaching in invention of Meago provides method to overcome the drawbacks of the prior art in delivering MBMS streaming service through a mobile radio network.

As to claim13, “Ohlsson does not expressly disclose “the method according to claim 11, wherein the number of events occurring at the drift network control node which is counted by the counter are time periods elapsed since an lur linking procedure for the MBMS session has been performed for a predetermined user equipment unit” Meago discloses (Paragraph 46,Counting: this is the function that UTRAN performs when it wishes to

identify the number of multicast subscribers( all joined subscribers, or just above a threshold) in a particular cell, that wish to receive a multicast session for a particular service). Meago further discloses (Paragraph 59, an MBMS programs is the MBMS service plan defining service availability times and expected characteristics of content, content delivery or data rates over time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ohlsson's teaching in invention of Meago provides method to overcome the drawbacks of the prior art in delivering MBMS streaming service through a mobile radio network.

As to claim17, Ohlsson does not expressly disclose" the radio network control node according to claim 16, wherein the number of events occurring at the network control node which is counted by the counter is a number of user equipment units for which a lur linking procedure is performed for the MBMS session" Meago discloses (Paragraph 54, tracking: This is a function that allows UTRAN to follow the mobility of multicast subscribers. Inherently it can be used as a means of counting multicast subscribers), wherein tracking the number of a subscriber is read as counting a number of user equipment units.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ohlsson's teaching in invention of Meago provides method to overcome the drawbacks of the prior art in delivering MBMS streaming service through a mobile radio network.

As to claim18, Ohlsson does not expressly disclose "the radio network control node according to claim 16, wherein the number of events occurring at

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the drift network control node which is counted by the counter are time periods elapsed since an lur linking procedure for the MBMS session has been performed for a predetermined user equipment unit" Meago discloses (Paragraph 46, Counting: this is the function that UTRAN performs when it wishes to identify the number of multicast subscribers( all joined subscribers, or just above a threshold) in a particular cell, that wish to receive a multicast session for a particular service). Meago further discloses (Paragraph 59, an MBMS programs is the MBMS service plan defining service availability times and expected characteristics of content, content delivery or data rates over time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ohlsson's teaching in invention of Meago provides method to overcome the drawbacks of the prior art in delivering MBMS streaming service through a mobile radio network.

#### Conclusion

8. The prior art are made of records and not relied upon are considered pertinent to applicant's disclosure.

- U.S. Patent Number 6434389 B1 to Meskanen discloses method for selecting cell in cellular network has similar invention as recited in claim 11.
- U.S. Patent Application Number 20010049287 A1 to Plunkett teaches Methods and device for preventing toggling between two zones has similar invention as recited in claim 15.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to KUO WOO whose telephone number is (571)270-7266. The examiner can normally be reached on Monday through Friday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Abul Azad can be reached on 571-272-7599. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KUO WOO/  
Examiner, Art Unit 4133

/ABUL AZAD/  
Supervisory Patent Examiner, Art Unit 4133